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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,146	09/06/2000	William F. Beausoleil	POU9-1999-0183-US1	9242

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EXAMINER

GARCIA OTERO, EDUARDO

ART UNIT PAPER NUMBER

2123

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/656,146

Applicant(s)

BEAUSOLEIL ET AL.

Examiner

Eduardo Garcia-Otero

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/6/00 ✓
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION: Non-Final (first action on the merits)

Introduction

1. Title is: HIGH SPEED SOFTWARE DRIVEN EMULATOR COMPRISED OF A PLURALITY OF EMULATION PROCESSORS WITH IMPROVED MULTIPLEXED DATA MEMORY.
2. First named inventor is: BEAUSOLEIL.
3. Claims 1-4 have been submitted, examined, and rejected.
4. US Application was filed 9/6/2000, and no earlier priority is claimed.

Index of Cited Prior Art

5. **Staros** refers to US patent 5,708,850.
6. **Bass** refers to US patent 6,473,838.

Specification-objections-incorporation of essential material

7. The specification at page 1 is objected to as failing to provide proper incorporation of essential material according to MPEP 608.01(p)(I).
8. The attempt to incorporate essential material into this application by reference to copending applications using attorney docket numbers is improper for the reasons discussed below.
9. MPEP 608.01(p)(I)(A)(1) states "If the referenced application has not been published or issued as a patent, applicant will be required to amend the disclosure of the referencing application to include the material incorporated by reference..."

35 USC § 112-Second Paragraph-indefinite claims

10. The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
11. **Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite** for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
12. In claim 1, the apparently hierarchical structure of the claimed invention is not clear. It appears that possibly the preamble "emulation engine" comprises "a plurality of modules", and each module includes "clusters", and each cluster comprises a plurality of "processors that access

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a data memory". In other words, for example, 2 processors (at least) form a cluster, 2 clusters (at least) form a module, and 2 modules (at least) form an engine. Thus, said engine would have a minimum of $2 \times 2 \times 2 = 8$ processors. Said minimum 8 processors appear to exceed the 4 processor embodiment discussed at FIG 2 and Specification page 8.

13. Further, the logical relationship between the various hierarchical levels is not clear. For example, it is not clear how a plurality of processors is "organized" in a cluster, and is not clear how a plurality of cluster is "organized" in a module, and is not clear how a plurality of modules is "organized" in an engine.

14. Claims 2-4 are indefinite for the same reasons as claim 1.

35 USC § 112- first paragraph- enablement

15. The following is a quotation of the first paragraph of 35 U.S.C. 112: The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

16. Claims 1-4 are not enabled for the same reasons as the claim 1 indefiniteness rejection, see above.

35 USC § 102(b)

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action: A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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18. **Claims 1-4 are rejected under 35 U.S.C. 102(b)** as being anticipated by Staros.
19. Claim 1 limitation [1] **"plurality of processors"** is disclosed by Staros at Abstract "multiprocessor system".
20. Claim 1 limitation [2] **"time division multiplexer"** is disclosed by Staros at Abstract "time division multiplexed".
21. Claim 2 limitation [1] **"clock rate for read operations is twice the operating clock rate of said module"** is disclosed by Staros at Abstract "time division multiplexed".
22. Claim 3 limitation [1] **"plurality of processors"** is disclosed by Staros at Abstract "multiprocessor system".
23. Claim 3 limitation [2] **"first time division multiplexer"** is disclosed by Staros at Abstract "time division multiplexed".
24. Claim 3 limitation [3] **"second time division multiplexer"** is disclosed by Staros at Abstract "time division multiplexed".
25. Claim 4 limitation [1] **"clock rate for read operations is twice the operating clock rate of said module"** is disclosed by Staros at Abstract "time division multiplexed".

Conclusion

26. All claims stand rejected under: 35 USC 112, and 35 USC 102(b).

Communication

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Garcia-Otero whose telephone number is 703-305-0857. The examiner can normally be reached on Tuesday through Friday from 9:00 AM to 8:00 PM. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kevin Teska, can be reached at (703) 305-9704. The fax phone number for this group is 703-872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (703) 305-3900.

* * * *

JEAN R. OMERE
PRIMARY EXAMINER

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